

## Supplemental Figures

**Suppl. Fig. S1. Histological examination of a PRL-induced microscopic mammary lesion in a female that is conditionally deficient in Jak2.** (a) H&E staining (bar, 100  $\mu\text{m}$ ). (b, c) Immunostaining for cytokeratin (CK) 8 and 14. Slides were counterstained with DAPI (bar, 30  $\mu\text{m}$ ). (d -h) Immunohistochemistry for ER $\alpha$  and all four ErbB family members. Slides were counterstained with hematoxylin (bar, 50  $\mu\text{m}$ ).

**Suppl. Fig. S2. Loss of Jak2 does not affect expression and activation of Akt1 and Cyclin D1 in mammary tumors that result from an orthotropic transplantation of Jak2 deficient mammary cancer cells and their isogenic controls expressing Jak2.** Western blot analysis to determine the expression of phosphorylated and total levels of Akt1 as well as Cyclin D1 in PRL-induced mammary tumors lacking Jak2 and their wildtype controls.  $\alpha$ -Tubulin was used as a loading control.

**Suppl. Fig. S3. Examples of PRL-induced mammary tumors that stain positive for selected ErbB receptor tyrosine kinases.** Control panels on the right side show serial sections that were stained without the corresponding primary antibodies. All slides were counterstained with hematoxylin (bar, 50  $\mu\text{m}$ ).





